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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,436	01/25/2005	Juha Maijala	METSO-20	8543
36528	7590	10/09/2007	EXAMINER	
STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667			KRUER, KEVIN R	
			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			10/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/507,436

Applicant(s)

MAIJALA ET AL.

Examiner

Kevin R. Kruer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-47 is/are pending in the application.
- 4a) Of the above claim(s) 44-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/04;5/05;2/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☒ Other: 5/07.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Group I in the reply filed on July 9, 2007 is acknowledged. The traversal is on the ground(s) that the prior art Japanese reference cited by the examiner does not teach a coating comprising 1-30wt% binder and 70-99wt% inorganic filler. This is not found persuasive because the reference teaches inorganic filler may be utilized in amounts of 99.5: 0.5 relative to component C and component C may be utilized in amounts of 60:40 relative to the binder. Thus, the weight limits taught by the reference clearly include coatings meeting the claimed binder: inorganic filler ratio.

The requirement is still deemed proper and is therefore made FINAL.

***Information Disclosure Statement***

2. The information disclosure statements filed 9/13/04, 5/505, 2/27/06, and 5/15/07 have been fully considered. Enclosed herein is an initialed copy of each of said PTO-1449s.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0982120A1 (herein referred to as Bando).

Bando teaches a method for coating a surface of a continuous paper or board web formed of papermaking fibers (FIG 3 and 0082), with a dry coating powder (abstract), the method comprising the steps of: moving the continuous paper or board web between electrodes which are at different electrical potentials (0104); applying the dry coating powder on to a first surface of the continuous paper or board web by utilizing the difference in the electric potential (0081). The dry coating powder may be formed by freeze-drying. (0043) and has an average particle size of 1-15 micrometers (0043). The polymeric binder material has a glass transition temperature of 20° C to about 100° C (0034) and has a moisture content of less than 15% (inherent). The dry coating powder is pre-charged (0104). At least one additional layer is formed on the first coated surface by a dry surface treatment process (abstract).

Bando teaches the coating may comprise up to 60wt% inorganic coloring filler (0041) and up to 50wt% filler with a particles size of 1-5um (0058-0059). Thus, it would have been obvious to make a dry coating powder comprising 70-99% inorganic material and 1-30% polymeric binder material in order to obtain a coating with the desired coloring and properties.

Bando does not teach the continuous paper or board web is caused to travel at a speed of 1,200 to 2,500 m/min. However, it would have been obvious to the skilled artisan to vary the line speed of said paper to ensure quality control and productivity.

Bando does not teach simultaneously or sequentially applying a coating to both sides of the paper substrate. However, it would have been obvious to apply a coating to

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the backside of the paper substrate (either sequentially or simultaneously) in order to provide the substrate with image receiving capabilities on both sides thereof.

Bando does not teach passing the coating through a nip formed by a hot hard roll and a moving earthing member and subjecting the dry coating powder on the web to a temperature of 80-350°C, a linear nip load of 25-450 kN/m and a nip dwell time of 0.1-100 ms.. However, it would have been obvious to the skilled artisan to pass the coating of Bando through said nip in order to smooth the coating and obtain uniformity.

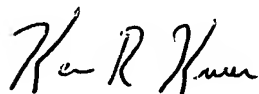
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kevin R. Kruer  
Patent Examiner-Art Unit 1773